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### XVI.—Descriptions of new genera and species of New-Zealand Coleoptera

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corneo, apice fuscescente; pedibus cyanescenti-griseis; iride brunnea.

Long. tot. c. 6.1 poll., culm. 0.7, alæ 2.75, caudæ 3.2, tarsi 0.75.

*Hab.* Katanga, S.E. Congo Free State.

*Criniger sylvicultor*, sp. n.

*C. similis C. cabanisi*, sed supra pallidior, gutture et pectore toto pallide sulfureo-flavis; præpectore olivascente sulfureo lavato; rostro fuscescenti-corneo, subtus pallidiore; pedibus pallide grisescentibus; iride olivascenti-griseo.

Long. tot. c. 7.0 poll., culm. 0.85, alæ 3.65, caudæ 3.6, tarsi 1.05.

*Hab.* Katanga.

*Calamonastes katangæ*, sp. n.

*C. similis C. cinereo*, sed brunnescentior; pectore et abdomine albidis; gula albida, fusco variegato; gutture summo et præpectore cineraceo, fasciam latam formantibus; rostro nigro; pedibus flavescenti-carneis; iride rufescenti-brunneo.

Long. tot. c. 4.1 poll., culm. 0.55, alæ 2.3, caudæ 1.7, tarsi 0.8.

*Hab.* Katanga.

*Dryodromas pearsoni*, sp. n.

Similis *D. rufifronti* et cauda nigra; reetricibus ad apicem cineraceis, pileo ferrugineo; dorso rufescenti-brunneo; uropygio et supracaudalibus cinerascensibus; subtus alba, gutture et præpectore pallide cervino tinctis; hypochondriis cinereis distinguenda; rostro brunnescenti-corneo, mandibula pallide carnea; pedibus brunnescenti-carneis; iride flavicanti-brunnea.

Long. tot. c. 4.1 poll., culm. 0.45, alæ 2.0, caudæ 2.0, tarsi 0.65.

*Hab.* Lufupa River, Western Katanga.

Dedicated to Dr. Arthur Pearson, Principal Medical Officer to the Tanganyika Concession Ltd., Kambore.

XVI.—*Descriptions of new Genera and Species of New-Zealand Coleoptera.* By Major T. BROUN, F.E.S.

[Continued from p. 71.]

Group *Eirrhinidæ*.

*Eirrhinus insignis*, sp. n.

*Subovate*, moderately elongate, nitid, sparsely clothed with fine yellowish hairs, which are somewhat concentrated on

spots behind; variegate, femora and thorax rufo-fuscous, the base and apex of the latter fusco-testaceous; tibiæ and rostrum testaceous; elytra rufo-fuscous, but with the following testaceous marks, a small portion of the second interstice continued along the basal margin, bent at the shoulder and prolonged backwards, a small spot at the side behind, the suture and apex, and four or five spots above; antennæ and tarsi reddish.

*Rostrum* arched, moderately slender, not twice the length of thorax; smooth in front, with two series of fine punctures above and one along each side. *Thorax* rather broader than long, a good deal narrowed but not constricted in front; rather closely, very distinctly, and somewhat rugosely punctured. *Scutellum* minute. *Elytra* broader than thorax at the base, their sides gently curved, gradually narrowed posteriorly, more strongly near the extremity; moderately coarsely striate-punctate.

*Antennæ* slender, implanted just before the middle. *Eyes* subrotundate, depressed. *Ocular lobes* absent. *Femora* unarmed; tibiæ stout, flexuous, mucronate at the extremity.

*Underside* fuscous, prosternum feebly incurved, third and fourth ventral segments shorter than second.

Agrees in structure with the European *E. acridulus*, but only half its bulk and otherwise dissimilar. Not like any described New Zealand species.

Length (rost. excl.)  $1\frac{1}{4}$ ; breadth  $\frac{5}{8}$  line.

Dunedin. One from Mr. T. Chalmers many years ago.

*Erirhinus insolitus*, sp. n.

*Subopaque*, variegate; thorax sparingly, elytra more evidently, clothed with fine yellow hairs; rufo-fuscous, with some dark spots on the elytra, rostrum and tibiæ rufescent, femora almost piceous, antennal club opaque, piceous, with grey pubescence.

*Rostrum* distinctly but irregularly punctate behind the middle. *Thorax* a third broader than long, more narrowed in front than behind; moderately coarsely and closely punctured, with rugose intervals, but with a linear central space smooth. *Scutellum* minute. *Elytra* slightly rounded laterally, gradually narrowed backwards from before the middle, very little wider than thorax at the base; punctate-striate near the suture to the extremity, striate-punctate towards the sides; interstices with fine serial punctures and appearing rugose; the coloration much, but irregularly, variegated.

*Antennæ* inserted between the middle and apex, basal joint of funiculus stout, second much more slender and shorter, 3-7 small and moniliform; club stout, ovate, apparently, but not distinctly, quadri-articulate.

Like *E. insignis*; the hind-body longer, much less attenuate posteriorly, differently clothed and sculptured, the variegation ill defined. The thorax is longer and more rugosely sculptured. The eyes are placed more on the upper part of the head. The thighs are more inflated, punctate, and emarginate underneath near the extremity. We have no other species like it.

Length (rost. excl.)  $1\frac{1}{2}$ ; breadth  $\frac{5}{8}$  line.

Otago. From the same source as the preceding one.

*Erirhinus spadiceus*, sp. n.

*Subnudus*, bearing only a few inconspicuous minute setæ; a little shining, rufo-castaneous, the tip of the rostrum, and the club, piceous.

*Rostrum* moderately coarsely and irregularly punctured, but nearly smooth in front. *Thorax* widest near the middle, slightly more rounded in front than behind, its length and breadth nearly equal; distinctly and moderately closely punctured. *Scutellum* small. *Elytra* widely incurved at the base and a little broader than the thorax, gradually narrowed backwards; striate punctate, quite striate behind; interstices plane, with fine serial punctures.

*Legs* robust; femora arched above; tibiæ a little flexuous, mucronate, the two hind pairs short. *Antennæ* slender, inserted between the middle and apex of the rostrum; basal joint of funiculus stout, joints 4-7 bead-like, seventh a little broader than preceding one; club large, articulate, with some yellowish pubescence.

*Underside* reddish, punctate. Prosteronum slightly incurved. Front coxæ contiguous, the intermediate slightly separated. Metasternum short, broadly depressed, as are also the basal two ventral segments, the second distinctly shorter than first, third and fourth well developed, fifth broadly impressed.

Distinguishable at once by the unicolorous, almost glabrous surface.

Length (rost. excl.)  $1\frac{5}{8}$ ; breadth nearly  $\frac{3}{4}$  line.

Mount Maungatua, Otago. One from Mr. S. W. Fulton.

*Erirhinus castigatus*, sp. n.

*Slender*, slightly shining, uniformly fulvescent, antennal club fuscous; sparingly clothed with minute greyish hairs.

*Rostrum* finely punctate, indistinctly carinate, obviously longer than thorax, almost quite parallel-sided, only slightly arched. *Eyes* subrotundate, free from thorax, not prominent. *Thorax* about as long as broad, evidently narrower in front than behind; finely but quite distinctly and not closely punctured. *Scutellum* minute. *Elytra* elongate, wider than thorax at base, gradually narrowed backwards, distinctly and regularly striate-punctate.

*Legs* moderately slender; tibiae slightly mucronate at the extremity; third tarsal joint with elongate lobes. *Antennae* inserted near the apex; scape slender, but a little clavate near the extremity, basal joint of funiculus stout, seventh rather broader than sixth.

*Underside* shining, similar to the upper surface in colour.

Another concolorous, easily recognisable species, unlike any other as yet found here.

Length (rost. excl.) 1; breadth  $\frac{3}{4}$  line.

Mount Maungatua, Otago. Another of Mr. S. W. Fulton's discoveries, a single specimen only.

*Eugnomus antennalis*, sp. n.

*Opaque*, variegate, fusco-rufous, antennae and tarsi rufo-castaneous.

*Rostrum* stout, not twice the length of thorax, slightly constricted medially so that the scrobes are visible above; densely and coarsely punctate, not distinctly carinate, with slender yellow hairs. *Head* broadly depressed between the widely separated and prominent eyes, clothed and sculptured like the rostrum, but also with numerous pale yellow scales around the eyes. *Thorax* evidently broader than long, very slightly constricted at apex, closely punctate, with slender fulvous hairs on the disk, but covered with pale yellow squamæ at the sides. *Scutellum* oblong. *Elytra* evidently wider than thorax at the base, very slightly and gradually narrowed towards the hind thighs, more strongly behind these, apices subtruncate; punctate-striate, the interstices minutely punctured and slightly asperate, there are two series of minute granules in the sutural striae near the base, where the hairs are coarser and of a brighter yellow than elsewhere, there are also a few scales on the shoulders; they are irregularly maculated with dark fuscous, and between the hind thighs this colour predominates, on the posterior declivity the inner four interstices are reddish, the third, on each elytron, is quite pallid and abruptly bent forwards at the apex, the fourth and sixth end within the pale zone, are

slightly raised, and quite fuscous. *Pygidium* much exposed, testaceous, finely and closely punctate. Front *femora* dilated and with a minute denticle below, the others angulate and dentate, the posterior most strongly.

*Antennæ* rather stout; basal joint of funiculus quite half the length of the others conjointly, second also elongate but slender, 3-7 small; club large, opaque.

*E. nubilans* most nearly approaches this species, which, however, is larger, with a shorter thorax, more exposed pygidium, more abruptly enlarged club, and differently formed funiculus.

Length (rost. incl.)  $2\frac{3}{4}$ ; breadth 1 line.

Karori, Wellington. One example from Mr. G. V. Hudson.

*Eugnomus femoralis*, sp. n.

*Elongate*, castaneo-rufous, clothed with rather fine inconspicuous grey hairs, the sides of thorax and the posterior portion of elytra with grey setiform scales. Underside with similar scales and pubescence; club fuscous.

*Rostrum* a little dilated in front, irregularly punctured. *Scape* attaining back of eye. *Thorax* rather narrow, distinctly and closely punctured. *Elytra* rather elongate and narrow, yet broader than thorax at the base; striate-punctate, interstices finely rugose. *Femora* emarginate below near the extremity, but not dentate or conspicuously angulate.

A uniformly coloured, rather elongate species near *E. fervidus*, differently clothed, with the thorax and hind-body narrower, and without the common angulation of the femora.

Length (rost. incl.) 2; breadth  $\frac{5}{8}$  line.

Waitakerei Range. Six specimens in my own collection.

*Stephanorhynchus osculator*, sp. n.

*Variegate*, densely covered with obscure greyish and fuscous squamæ without forming regular spots, the elytral suture fusco-rufous behind; antennæ also infusate red, but with the basal joint of the funiculus fuscous.

*Rostrum* laterally compressed, strongly ridged from the antennal insertion to the eyes, the head broadly depressed and bicristate, so that when looked at sideways there appears to be a deep gap in line with the eyes. *Thorax* rather broader than long, much narrowed anteriorly, with one constriction behind, and another before, the middle; its surface uneven, with two small median tubercles. *Elytra*

widest at the base, humeral angles slightly prominent and oblique, apex bituberculate; the usual large elevations between the hind thighs are obliquely flattened towards the suture, there are also numerous small elevations so that the punctuation is very irregular. The *femora* are dilated, the posterior more strongly angulate and dentiform underneath than the intermediate, the anterior less so.

*Antennæ* inserted near the apex; second joint of the funiculus shorter and more slender than the first, and nearly twice as long as the third; 4-7 moniliform; club elongate, quadri-articulate, its intermediate joints subquadrate, the basal as long as the second but curved towards its base, the terminal small and conical.

In *S. curvipes* the second joint of the club is twice the length of the first; this, therefore, at once separates the two species. In *S. tuberosus* the head and rostrum are similar, but the elytra are nearly concolorous, much less asperate, with more prolonged apices, and the insect itself is much larger.

*Obs.*—Two varieties of *S. tuberosus* occur on the Waitakerei Range, Auckland, and another at Greymouth, this last being labelled *S. aper* in my cabinet.

Length 2-2½ (rost. incl.); breadth  $\frac{7}{8}$  line.

Tararua and Rimutaki Ranges. Mr. G. V. Hudson.

*Stephanorhynchus morosus*, sp. n.

*Robust*, covered with dull, slightly variegated, griseofusuous, minute scales and setæ.

*Rostrum* somewhat laterally compressed and ridged behind, thus leaving an obvious gap between its base and the lateral ridges on the head, these latter are deeply and widely separated, and the inter-ocular depression is distinct. *Thorax* considerably narrowed anteriorly, constricted near the apex and behind the middle, with two small median prominences. *Elytra* twice as broad as thorax at the base, unusually broad, moderately narrowed behind, apices not at all spiniform or prominent; they are striate-punctate, but the sculpture is interrupted, or hidden; the pair of post-median prominences are well developed, and there are ten or twelve small tubercular elevations or nodosities, chiefly near the shoulders, sides, and apex. *Legs* dark and minutely speckled. *Funiculus* slender, basal joint distinctly stouter and somewhat longer than second, the last three small and reddish; club elongate, opaque, 4-jointed.

Quite distinct from all but *S. tuberosus*, and differing



from it in the longer head, broader and shorter hind-body, simple elytral apices, and more sombre appearance.

Length (rost. incl.)  $3\frac{1}{4}$ ; breadth  $1\frac{1}{2}$  line.

Mount Arthur. One from Mr. T. F. Cheeseman.

### Group *Belidæ*.

#### *Pachyura venusta*, sp. n.

*Elongate*, subcylindrical; brilliant æneo-viridis, sides of thorax and elytra somewhat rufescent, the head near the eyes and apical margin of thorax metallic red, rostrum purple, legs and antennæ fusco-testaceous.

*Rostrum* rather shorter than head and thorax combined, slightly and gradually dilated anteriorly; minutely and distantly punctured near the apex, the base more distinctly yet finely, each puncture with a minute grey seta; antennal insertion close to the base, prominent. *Head*, eyes included, almost as broad as the middle of thorax, a little narrower behind; its surface closely granulate-rugose. *Eyes* large, broadly longitudinally oval. *Antennæ* elongate, second joint shorter than first and nearly as stout, joints 3-5 rather slender and elongate, nearly equal to one another, 6 and 7 shorter, 8-10 evidently longer and broader and more infusate, 11th slightly longer than 10th; these terminal four joints may be termed the club. *Thorax* about as long as broad, its sides slightly rounded near the middle, more narrowed in front than behind; there is an ill-defined central line, its sculpture seems like that of the head but is not quite as coarse, or it may be termed punctate with rugose or granulate intervals, either term may be accurate according to the point of view. *Scutellum* rather small. *Elytra* cylindrical, very slightly dilated at the shoulders, not at all posteriorly; basal margin obliquely truncate towards the suture; they are transversely striate-punctate, interstices convex but somewhat irregular; like the head and thorax they are scantily clothed with slender, inconspicuous, greyish hairs.

A second specimen, found at Clevedon, has a rather longer rostrum, and the elytra are a little broader behind than near the shoulders; this I consider is the female. The elytra are  $\frac{7}{8}$  of a line in width.

*P. sumptuosa* may be distinguished by its larger size, more curvate anterior tibiæ, by the slight basal depression of the thorax and the one behind the scutellum, as well as by the

four patches of white hairs on the elytra. The fourth antennal joint is longer.

♂. Length (rost. incl.) 3; breadth  $\frac{5}{8}$  line.

Howick. One individual in my own collection.

*Pachyura violacea*, sp. n.

*Body* only slightly nitid, violaceous, sparingly but evenly clothed with fine but quite distinct greyish hairs, tip of rostrum rufescent, antennæ and legs light brown, claws nearly black.

*Rostrum* short, distinctly punctured near its base. *Head* widest near the front, moderately closely but not very coarsely punctured, with slightly rugose intervals. *Thorax* a little transverse, narrower in front than behind, base bisinuate; there is a very fine stria along the middle, its punctuation is rather finer than that of the head. *Scutellum* moderately large and rounded. *Elytra* subcylindrical, being slightly narrowed behind the shoulders only, closely and distinctly punctured and, on some spots, somewhat transversely rugose, but without the elevations and deep transverse striæ of *P. metallica*, *P. sumptuosa*, and others.

Most nearly resembles *P. rubicunda*, which has two small protuberances at the tip of the rostrum.

Length (rost. incl.)  $2\frac{1}{2}$ ; breadth  $\frac{3}{4}$  line.

Karori, Wellington. Taken off young Totara tree. Mr. G. V. Hudson, one specimen.

*P. pilosa*, variety of *P. rubicunda*.—This differs from my typical examples in having darker elytra so covered with grey hairs that the surface appears greyish. The apical prominences on the rostrum are quite distinct.

Helensville. One in my own collection.

Group Cryptorhynchidæ.

APHOCÆLIS, gen. nov.

*Body* broad, oviform, convex, covered with scales and short erect setæ.

*Prosternum* broadly excavate, as in *Psepholax*, but with more sharply defined lateral borders in front of the coxæ. *Mesosternal lamina* very short and transverse before the coxæ, the suture between it and the metasternum quite straight. Intermediate *coxæ* as widely separated as the posterior. Second *ventral segment* much abbreviated, very short, third and fourth very short, like those of an *Acalles*, with deep

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sutures, 3-5 on a lower plane than the basal two, but on the same level as the epipleura. *Femora* notched and grooved near the extremity and with a denticle underneath. *Tarsi* with almost glabrous soles, having only a few fine hairs at the sides, but with more along the front of the third joint.

Should be interposed between *Psepholax* and *Oreda*. At once differentiated from the former by the widely separated middle coxæ, by the absence of any raised triangular mesosternal process, and the abbreviation of the intermediate ventral segments; from the latter by the absence of any well-limited pectoral canal. *Psepholax femoratus* (852) is closely allied to *Aphocælis*, and if sternal structure and wide separation of coxæ be considered as of generic importance, Dr. Sharp's *Psepholax simplex* (854) must ultimately become the type of a distinct genus also.

*Aphocælis versicolor*, sp. n.

*Rostrum* rather shorter than thorax, considerably dilated in front for two-thirds of its whole length below; the scrobes therefore appear deep and open and are quite visible from above; they begin near the apex and extend to the eyes. *Scape* very short and stout, barely attaining the eye. *Funiculus* thick, much longer than the scape, 7-articulate, basal joint obconical, not much longer than broad; second about as large as the first, more slender at the base; 3-7 transverse. *Club* short, ovate. *Head* broad. *Eyes* subrotundate, but slightly acuminate in front, moderately prominent, distant from the thorax and each other. *Thorax* bisinuate at the base, broader than long, much contracted in front, closely punctured, covered with fuscous and dark greyish squamæ; without ocular lobes, its apex emarginate. *Scutellum* absent. *Elytra* short, a little broader than thorax, rounded and nearly vertical behind; they are distinctly striate, but the punctuation is concealed by the squamosity; third interstices a little elevated, most evidently on top of the posterior declivity, but not nodiform there; at the base they bear minute black crests. *Tibiæ* rather finely setose, mucronate, the anterior slightly flexuous, the others prolonged at the outer extremity and armed with a distinct median tooth externally.

The derm seems to be pitchy red, but the variegated dark and greyish squamæ entirely cover the surface. The elytra on some parts appear to be studded with minute black tubercles. The rostrum is dull piceous, punctate, with a distinct inter-antennal groove; its apex is nearly vertical

and smooth, and bears four little clusters of fine yellow setæ.

Length (rost. incl.)  $2\frac{1}{2}$ ; breadth  $1\frac{3}{8}$  line.

Otira Gorge. One individual found by Mr. J. H. Lewis.

*Psepholax denticostatus*, sp. n.

*Convex*, subovate, widest near the middle, opaque; sparingly covered with small yellowish-grey scales and setæ, these latter more elongate and conspicuous on the sides near the base of the elytra; piceous, tarsi and antennæ pitchy red.

*Rostrum* longer than head, broad, nearly plane; at the point of antennal insertion, near the apex, broader below than above; nearly smooth in front, with close rugose sculpture like that of the head, which, at the base, is medially depressed and nearly twice the breadth of the rostrum. *Thorax* nearly twice as broad as it is long, much narrowed, but not constricted, towards the front, which is obviously emarginate medially, base subtruncate; it is rather feebly impressed behind along the middle, the surface appears closely punctate or granulate according to different points of view, the pale squamæ are somewhat concentrated near the sides. *Scutellum* small, subrotundate. *Elytra* of same width as thorax at base, slightly broader near the middle, rather gradually yet considerably narrowed posteriorly; on each elytron, near the suture, there is a ridge which is broad at the base, somewhat compressed and more elevated near the middle, but becoming obsolete behind; this ridge has granular sculpture near the base, but on the middle there are three or four compressed dentiform prominences; the second ridge is much less elevated, with granular or minute tubercular sculpture; behind it is more sharply defined, and is there covered with fine yellowish scales; the third resembles the first, but does not extend quite as far back; the fourth is indistinct as far as the middle, but behind is exactly similar to the second, though not reaching back as far; the suture along the hind slope is like the second ridge; the intervals may be termed irregular striæ, even those along the side are not distinctly punctured.

*Anterior femora* dilated and angulate, but not distinctly dentate, underneath; the posterior laterally compressed and curvate; front tibiæ a little flexuous, rather thicker above than at the extremity; the intermediate evidently shorter, densely squamose, with a dentiform projection near the extremity; the posterior squamose, somewhat arched.

*Scape* short, gradually incrassate; funiculus finely pubescent, basal joint short and stout, joints 3-7 transverse, gradually becoming broader; club large, oblong-oval.

*Underside* rather finely punctate, with depressed greyish setæ; third and fourth ventral segments nearly nude.

The old *P. sulcatus* is described as having six ribs on each elytron, with punctated intervals. Its scutellum is quite elongate, like that of *P. granulatus*, but in *P. denticostatus* it is small and nearly rotundate; this, therefore, is a good distinguishing character. With the exception of *P. coronatus* the sexes have not been satisfactorily determined.

♂. Length (rost. incl.)  $3\frac{1}{4}$ ; breadth  $1\frac{3}{8}$  line.

Karori, Wellington. One from Mr. G. V. Hudson.

*Zeacalles lepidulus*, sp. n.

*Body* very convex, subovate, covered with small, depressed, tawny squamæ; a few more elongated erect white ones near the sides and apex of the elytra and a few short, erect, coarse infusate setæ; it is infusate red, with red tarsi and antennæ.

*Rostrum* red, longitudinally sculptured, apical portion finely punctate. *Thorax* about as long as broad, a good deal but very gradually narrowed anteriorly; apex obtusely rounded, very slightly depressed in front, its punctuation obscured by the elongate squamæ. *Elytra* cordate, rather short, their sides and apex vertical, very slightly broader than thorax at the base, considerably broader before the middle, gradually yet a good deal narrowed posteriorly; they are rather abruptly elevated near the base and apparently striate; on top of the posterior declivity there are two well-developed nodosities, two less elevated but more elongate ones at the base, and three or four smaller ones near the sides; the grey scales are most perceptible on the sides near the base; there are also a few dark specks here and there. *Legs* stout, bearing coarse greyish setæ. *Tarsi* finely setose underneath, third joint expanded, grooved or excavated above, but not perceptibly lobed; claws very small.

*Scape* short, slender at the base, gradually thickened. *Funiculus* elongate, first joint stout, second and third slender and moderately elongate, the former the longer of the two, 4-7 obconical and gradually incrassate; club oval, triarticulate.

Larger than the four previously described species, and distinguished therefrom by the elytral nodosities. The lobes

of the third tarsal joint are very short in all these four species; in this one they are quite obsolete.

Length (rost. excl.)  $1\frac{1}{4}$ ; breadth  $\frac{3}{4}$  line.

Totara, Southland (*Mr. A. Philpott*); one individual.

#### HATASU, gen. nov.

*Robust*, convex, suboblong, squamose.

*Rostrum* rather shorter than thorax, moderately broad, subparallel. The *scrobe* begins before the middle and extends to the lower and front part of the eye. *Scape* almost straight, only slightly incrassate, attaining the front of the eye. *Funiculus* 7-articulate, basal two joints elongate, second evidently the longer; third rather longer than broad; 4-7 subquadrate, the seventh larger than the preceding one; club elongate-oval, quadriarticulate. *Eyes* just free from thorax, lateral, hardly convex, distinctly faceted, truncate in front. *Thorax* conical, somewhat prolonged over the head; deeply emarginate behind the eyes, obtusely rounded and with vibrissæ just below them when the rostrum is extended forwards. *Scutellum* absent. *Elytra* closely adapted to the base of thorax, the shoulders slightly porrect, a little widened behind the middle.

*Legs* stout and elongate. *Femora* grooved at the extremity, but not distinctly angulate or dentate below. *Tibiae* flexuous, with prominent terminal spurs. *Tarsi* with fine dense pubescence underneath, not in the least spongy; third joint moderately expanded, deeply and widely excavate above, emarginate at apex, but without distinctly projecting lobes.

*Pectoral canal* deep, not extending beyond the back part of the anterior coxæ, and limited behind by the strongly elevated border of the mesosternum, which is in contact with the front coxæ. Intermediate and posterior *coxæ* widely separated. *Metasternum* short. *Abdomen* narrowed behind, second segment, at the sides, about as long as the first, the frontal suture sinuate; third and fourth moderately short, conjointly, quite as long as the second, all the sutures well marked.

At once distinguishable from *Acalles* by the abbreviated pectoral canal and from *Dendrostygnus* and *Tychanopais* by the unarmed femora and different scrobe, which in these genera starts nearly from the apex.

#### *Hatasu dorsale*, sp. n.

*Opaque*, black; antennæ dark red; tarsi piceous; squamosity black, infusate or tawny; the last hue predominates along the sides; legs more or less maculate.

*Rostrum* closely and rugosely punctate in front, with fewer punctures and a few scales behind; it is dull black. *Antennæ* with greyish hairs, the club densely pubescent. *Thorax* as long as it is broad, its sides nearly straight behind, distinctly but not abruptly narrowed anteriorly; disk nearly plane, with an elongate impunctate space along the middle; tawny scales form a central streak at the base, its apex is not crested, but appears cleft at the middle; along the centre it is of a sooty colour; along the sides some short, erect, coarse setæ are mingled with the tawny scales; its punctuation is concealed. *Elytra* suboblong, nearly vertical, and much narrowed behind; along the middle of the dorsum it is dull black, with very few minute, rounded, flattened, tawny scales; on each side of the suture there are two series of coarse, almost foveiform, distant punctures, the sides are foveate, with squamose elevated intervals, so as to seem tuberculate; there are four dark squamose elevations on top of the posterior declivity; the third interstices are more or less irregularly elevated and blackish, and the apex bears several small nodosities and punctures.

*Underside* dull black, covered with pale brown or greyish scales, so that no punctures are visible.

Length (rost. excl.)  $3\frac{3}{4}$ – $4\frac{1}{2}$ ; breadth  $1\frac{3}{4}$ – $2\frac{1}{4}$  lines.

Broken River. I am indebted to Mr. J. H. Lewis for my pair of specimens.

#### CLYPEOLUS, gen. nov.

*Rostrum* as long as thorax, very gradually narrowed backwards, the nearly smooth, subcordate, clypeal portion well delineated. *Mandibles* not porrect, vertical in front. *Scrobes* deep, quite lateral, extending from behind the middle to the front of the eyes. *Scape* flexuous, slender, very gradually incrassate, rather short, attaining the front of the eye. *Funiculus* elongate, second joint evidently longer than the elongate basal one, third longer than fourth; seventh moniliform, rather broader than sixth. *Club* ovate, acuminate, triarticulate. *Head* moderately broad. *Eyes* widely separated above, quite lateral, subcuneiform, acuminate in front. *Thorax* bisinuate at base, abruptly contracted anteriorly, with feeble ocular lobes. *Scutellum* sunken or absent. *Elytra* of same width as thorax at base, much narrowed and nearly vertical behind. *Femora* long and thick, medially dentate, grooved near the extremity. *Tibiæ* flexuous, with robust apical spurs. *Tarsi* slender, finely setose underneath, third joint moderately expanded and lobed.

*Pectoral canal* deep, extending to middle of intermediate

coxæ. Basal *ventral segment* very little longer than second, its suture slightly medially incurved behind, third and fourth only moderately abbreviated, fifth biimpressed.

Allied to *Tychanus*, differentiated therefrom by the well-defined clypeus, perpendicular front face of mandibles, &c.

*Clypeolus cineraceus*, sp. n.

*Compact*, robust, subovate, piceous, densely covered with grey, yellowish-grey, and pale brown scales; antennæ and tarsi pale ferrugineous.

*Rostrum* subparallel, moderately finely and closely punctured, the clypeal portion nearly smooth. *Thorax* of the same width as elytra at the base, one-fifth broader than long, abruptly narrowed and depressed in front, its apex truncate and a little prominent, but not distinctly crested, having only a few coarse erect setæ; its surface closely punctate, most of the squamæ yellowish grey, the basal portion somewhat flattened backwards and bearing a short pale ridge in front of the scutellum, which it conceals; the erect scales are congregated at the sides. *Elytra* slightly wider behind the posterior femora than elsewhere, much narrowed and declivous behind, with coarse punctures not disposed in regular series; their basal portion more or less infusate, the third and fifth interstices somewhat prominent there, the suture alongside the sunken scutellum slightly raised and bearing a few minute shining granules; the squamosity from the shoulders to the posterior declivity is greyish; there are two widely distant nodosities at the summit of the declivity, and between each of these and the shoulder there are three or four smaller prominences.

*Underside* thickly covered with griseous and infusate scales.

Length (rost. excl.)  $2\frac{3}{4}$ ; breadth  $1\frac{1}{2}$  line.

Broken River. A single specimen from Mr. J. H. Lewis.

*Acalles fuscidorsis*, sp. n.

*Subovate*, robust, compact, densely squamose, variegate, dark fuscous and infusate grey; antennæ and tarsi red.

*Rostrum* stout, parallel, covered with tawny scales, apparently a little asperate in front, with a squamose ridge along its basal portion; it is of about the same length as the thorax. *Head* broadly depressed. *Thorax* an eighth broader than long, much narrowed anteriorly and projecting over the head, apex emarginate, with coarse squamæ, but not



distinctly crested there; the disk seems flattened, but is slightly ridged along the middle, squamosity fuscous, almost black near the sides; these, however, are pallid; the erect squamiform setæ are nearly black. *Elytra* as wide as thorax at the base, but becoming a little wider behind the middle; they are a good deal narrowed but not quite vertical behind; from the base four (two on each elytron) flexuous ridges extend towards the posterior declivity; the enclosed space is darker than the sides or apex; on top of the declivity there are two rather distant, somewhat rounded, moderately prominent crests; the sides are more or less uneven, but the darker basal area is nearly plane; they are coarsely striate-punctate apparently. *Legs* squamose, variegated; femora widely notched below near the extremity, and bearing coarse setæ, so as to appear subdentate near the middle; third tarsal joint expanded, but with very short lobes, pubescent underneath.

*Antennæ* implanted just behind the middle; scape squamose, very gradually thickened, reaching the front of the eye; funiculus sparsely setose, rather long, basal two joints equally elongate, third distinctly longer than broad, five to seven bead-like; club opaque, ovate, densely pubescent.

The elytral disk appears unusually short, partly owing to difference in colour and rather long posterior declivity.

Length (rost. excl.)  $2\frac{3}{4}$ ; breadth  $1\frac{1}{2}$  line.

Invercargill. The description is drawn up from a unique specimen mounted on cardboard by Mr. A. Philpott.

*Acalles igneus*, sp. n.

*Convex*, subovate, densely squamose, variegate; basal half (but not the sides) of elytra and a median spot on base of thorax black; remainder of surface covered with fiery red scales, some coarse and depressed, others more elongate and erect; these are intermingled with very few greyish ones here and there; the rostrum and legs also bear more or less rufescent squamæ; antennæ testaceous.

*Rostrum* of about the same length as thorax, stout, expanded towards the eyes, finely medially carinate in front. *Thorax* about as long as broad, more narrowed in front than behind, its punctuation entirely hidden by the squamosity. *Scutellum* absent. *Elytra* convex, subcordate, obviously striate. *Legs* robust. *Scape* gradually incrassate, attaining the eye; funiculus 7-articulate, basal joint thick, 6 and 7 transverse, the latter the broader; club triarticulate, stout, ovate. *Ocular lobes* absent.

Length (rost. excl.) 1; breadth  $\frac{1}{2}$  line.

Broken River, Canterbury. Mr. J. H. Lewis secured two specimens; the one retained by him is even brighter, quite scarlet in fact. The fiery squamosity is distinctive.

*Acalles altus*, sp. n.

*Compact*, very convex, subovate, rough, densely covered with obscure greyish scales; antennæ and tarsi fulvescent; rostrum pitchy red.

*Rostrum* thick, gradually narrowed towards the middle, where the antennæ are inserted. *Scape* reaching backwards to the eye; funiculus 7-articulate, basal joint nearly as thick at apex as the scape, second more slender, nearly twice the length of third; seventh distinctly broader than the preceding ones; club ovate, triarticulate. *Thorax* rather longer than broad, much but not abruptly narrowed anteriorly, its frontal portion depressed; across the front of the basal portion are erect scales which almost form a pair of crests; it projects over the head, but is much shorter below. *Head* globose underneath, but distinctly depressed above between the eyes; this flattened part is blackish. *Elytra* very slightly wider than thorax at the base, short and subovate, and quite vertical behind: when examined from the side they are seen to be on an abruptly higher level than the thorax; they are also convex transversely; on the summit of the hind declivity there is a pair of prominent crests, there is also a less prominent one on each side, but not so far back. *Legs* stout and scaly.

*Underside* covered with greyish scales, all the coxæ almost equally widely separated. Pectoral canal deep and broad; its raised margins extend almost to the front of the intermediate coxæ. Metasternum abbreviated, so that the middle and hind coxæ nearly touch each other. *Abdomen* punctate, basal two segments on a higher plane than the short third and fourth, the second apparently very short.

The thorax doubtless is punctate and the elytra striate-punctate, but as the specimen may be needed afterwards in its natural condition, I have not spoilt it by scraping.

Like *A. cristatus* (1276), more sombre of aspect, with less obvious and fewer crests, and distinguished by the interocular depression. No doubt a new genus will ultimately be formed for these two species.

Length (rost. excl.) 1; breadth  $\frac{5}{8}$  line.

Broken River. From Mr. J. H. Lewis.

*Acalles albistrigalis*, sp. n.

*Subovate*, moderately convex, piceous; antennæ flavescent; tarsi infusate red; covered with depressed dark or obscure greyish scales and numerous coarse erect setæ, without distinct elevations or crests.

*Rostrum* short and broad, obviously shorter than thorax. *Antennæ* inserted at, or immediately in front of, the middle of rostrum; the scape only moderately thickened apically, barely reaching the eye; funiculus indistinctly pubescent, basal joint stout, second and third rather slender and elongate, 5-7 short; club ovate, articulate, pubescent. *Eyes* rather flat, coarsely faceted. *Thorax* evidently longer than broad, gradually narrowed anteriorly, its frontal portion a little depressed; at its base there are two longitudinal streaks formed by whitish scales; the base is sharply truncate. *Elytra* short, subcordate, slightly wider than thorax at base. *Legs* stout, bearing erect, coarse, squamiform setæ.

A carefully denuded specimen shows that the derm is slightly glossy, that the thorax, in proportion to its small size, is coarsely and very closely punctured, and that the elytra have, on each, two well-marked sutural striæ, the sculpture beyond being regularly striate-punctate.

This, one of the smallest species of *Acalles*, may be identified by its short rostrum and the relatively long thorax with its pair of whitish basal streaks.

Length (rost. excl.)  $\frac{3}{4}$ ; breadth  $\frac{3}{8}$  line.

Broken River (*Mr. J. H. Lewis*); two specimens.

*Acalles aterrimus*, sp. n.

*Convex*, subovate, sparingly clothed with erect setæ; black; antennæ red, tarsi rufo-piceous.

*Rostrum* stout, slightly and gradually narrowed towards the middle, its sculpture longitudinal but irregular, with a few yellowish-grey scales at the base. *Scape* flexuous, gradually incrassate, implanted just behind the middle and just attaining the eye. *Funiculus* nearly glabrous, basal joint stout, second rather shorter and much more slender, 4-7 small and about equal. *Club* ovate, dark, with grey pubescence, indistinctly triarticulate. *Thorax* longer than broad, subconical, moderately narrowed and a little depressed in front; this frontal portion slightly shining, with less numerous and finer but very distinct punctures; the basal portion

closely and very coarsely punctured, a little depressed longitudinally in the middle, its base truncate; it bears some erect infusate setæ at the sides. *Elytra* subcordate, of the same width as the thorax at the base, widest near the middle, apex much narrowed and nearly vertical; they have series of relatively coarse punctures, coarser at the sides than at the suture, and becoming striate behind; the interstices beyond the second row of sutural punctures appear somewhat elevated from base to apex; there are no squamæ, only a few coarse erect setæ. *Legs* stout, coarsely setose, apical hooks of the tibiæ well developed.

*Underside* black; basal ventral segments coarsely but not closely punctured, second barely half the length of the first, the suture indistinct; third and fourth very short, with deep sutures; fifth reddish, minutely sculptured. Pectoral canal profound, its raised hind margin extending to the middle of intermediate coxæ. Metasternum very short. There are no distinct ocular lobes.

The plain black colour, absence of squamosity, and rather long medially depressed thorax are distinctive characters.

Length (rost. excl.)  $\frac{3}{4}$ -1; breadth  $\frac{3}{8}$  line.

Broken River (Mr. J. H. Lewis). Two examples, the smaller one probably the male.

*Acalles præsetosus*, sp. n.

*Minute*, rather broad, subovate, without crests or inequalities, covered with pale sappy matter and erect, coarse, squamiform setæ of a greyish-yellow colour, and at the base of the thorax with two elongate patches of minute, rounded, cream-coloured scales; antennæ and tarsi red.

*Rostrum* stout, gradually narrowed medially, with many depressed greyish scales which are perceptibly separated from each other. *Thorax* apparently longer than broad, widest behind the middle, gradually narrowed towards the front, base truncate; the surface punctate and studded with erect scale-like setæ. *Elytra* slightly wider than thorax at the base, moderately short and broad, only a little broader near the middle than elsewhere, rounded and nearly vertical behind, distinctly striate-punctate, their clothing similar to that of the thorax. *Legs* stout, almost as coarsely setose as the body. *Tarsi* with fine, white, brush-like soles, their third joint moderately dilated, with well-developed lobes.

*A. albistrigalis* is a rather smaller and narrower insect, with altogether different vestiture, yellow antennæ, and with

a triangular notch at the base of the elytra, indicating the presence of a scutellum, which, however, as in this species, could not be detected.

Length (rost. excl.)  $\frac{7}{8}$ ; breadth  $\frac{1}{2}$  line.

Invercargill (*Mr. A. Philpott*); one only.

*Acalles robustus*, sp. n.

*Compact*, convex, subovate, robust, pitchy black; antennæ and tarsi ferrugineous, irregularly squamose and setose.

*Rostrum* stout, longer than thorax, gradually and slightly narrowed backwards, punctate and longitudinally rugose. *Antennæ* scantily pubescent; the scape just attains the eye; basal two joints of funiculus equally elongate, 3-7 small; club ovate, articulated, pubescent. *Eyes* oblique, acuminate in front. *Thorax* rather short, subconical, a little constricted in front, moderately finely and closely punctured; a flat space along the middle, broad behind but narrower in front; is covered with depressed fuscous scales and is bordered with darker erect ones, its sides more or less squamose, but not crested. *Scutellum* absent. *Elytra* ample, subcordate, widest before the middle, much narrowed but not vertical behind, slightly broader than thorax at the base; rather bare along the middle, with two series of narrow elongate impressions along each side of the suture; on each elytron, before the middle, there are four dark, squamose, but not very prominent elevations, one being on the shoulder, two near the base, the fourth a little further back; a slightly curved squamose ridge extends from near the middle thigh to the summit of the declivity, but does not reach the third interstice; the sides and posterior declivity are covered with scales, a few being paler than others; all, however, are infusate. *Legs* stout, bearing dark scales and outstanding coarse setæ.

*Underside* opaque, fusco-niger, with yellowish-brown squamæ; second ventral segment shorter than the first, both rather finely sculptured, fifth rather closely and moderately coarsely punctured; pectoral canal between the middle coxæ limited by elevated margins. *Femora* grooved underneath, the anterior somewhat angulate but not dentate.

There can be but little difficulty in identifying this rather large species.

Length (rost. excl.)  $2\frac{1}{2}$ ; breadth  $1\frac{3}{8}$  line.

Mount Te Aroha. Two in my own collection.

*Acalles flavisetosus*, sp. n.

*Oblong-oval*, moderately convex, without appreciable inequalities of surface; rufo-fuscous; rostrum slightly shining piceo-rufous; the body densely covered with small, round, depressed, yellowish-grey scales, and rather short but not coarse decumbent yellow setæ, which, on the elytra, form regular series on the interstices.

*Rostrum* finely punctate, nearly nude, base squamose, the apex with a few erect yellow setæ; it is slightly and gradually narrowed towards the middle; there is a distinct contraction or notch at each side of the base. *Eyes* of normal shape. *Scape* moderately slender, just touching the eye. *Funiculus* with yellowish pubescence, first joint stout and but little longer than second; third to seventh gradually thickened; club ovate, articulate. *Thorax* contracted in front, feebly sinuate, and depressed at the base; with an indistinctly raised line along the middle, apparently closely but not coarsely punctured. *Scutellum* deeply sunk or absent. *Elytra* oblong, slightly broader than thorax at the base, a good deal narrowed but not quite perpendicular behind, coarsely striate-punctate. *Femora* grooved underneath; tibiae uncinatæ and setose; tarsi with brush-like, not spongy, soles.

*Pectoral canal* deep, limited between the intermediate coxæ by strongly elevated margins. *Metasternum* rather broadly depressed. *Abdomen* on the same plane as the epipleura, second segment in the middle quite half the length of the first, intervening suture quite straight, third and fourth short; underside clothed with yellowish scales.

This species may be identified by the absence of superficial inequalities, almost uniform coloration, and by the basal margin of the thorax being depressed and densely covered with small yellow scales; this last peculiarity I have not noticed in other species.

Length (rost. excl.)  $1\frac{3}{4}$ ; breadth  $\frac{7}{8}$  line.

Broken River (Mr. J. H. Lewis); a single specimen.

*Sympedius rectirostris*, sp. n.

*Compact*, convex, subovate, variegate, densely squamose; antennæ and tarsi ferrugineous.

*Rostrum* about as long as thorax, not arched, its basal half slightly expanded towards the eyes and bearing grey squamæ, the apical portion nearly nude and smooth. *Thorax* much, but not abruptly, narrowed anteriorly, with a pair of prominent light brown or testaceous crests at the apex; this

frontal portion depressed, so that the basal part appears to be abruptly elevated and marginate with short erect scales; the discoidal squamosity is fuscous and overlapping, thus concealing the punctuation; the lateral squamæ are paler. *Scutellum* small. *Elytra* apparently striate, but their whole sculpture is rendered indistinct by the overlapping scales, most of which are dark, but paler on the third and fifth interstices, which look like interrupted ridges, the inner being most distinct; near each side, in line with the hind thighs, some greyish scales are concentrated; they are of the same width as the thorax at the base, but curvedly narrowed behind. *Tarsi* setose, penultimate articulation twice as broad as the second, transverse, with very short lobes.

A veritable *Sympedius*, agreeing in most respects with *S. testudo* (889), but only about half its bulk, with the rostrum straight. The basal joint of the funiculus is incrassate, but does exceed the slender second in length; the antennal insertion is exactly at the middle of the rostrum. It differs from *S. lepidus* (1683) in appearance and coloration; that species, however, has more slender tarsi, more abruptly dilated third joints, and more slender terminal ones; the antennæ are stouter and are implanted just before the middle.

Length (rost. excl.)  $1\frac{3}{8}$ ; breadth  $\frac{3}{4}$  line.

Otara, Southland. One sent to me by Mr. A. Philpott in November 1894.

#### OMÆACALLES, gen. nov.

*Body* compact, convex, subovate, broadest at the middle and tapering towards both extremities, squamose. *Legs* elongate and rather slender; *tibiæ* straight, uncinatè at apex. *Scape* rather slender, incrassate apically, barely reaching the eye. *Funiculus* 7-articulate, basal two joints obconical, of nearly equal length, neither elongate; 3-6 rather longer than broad, almost moniliform, seventh transverse; club ovate. *Eyes* depressed, subtriangular, truncate below and nearly so behind. The *scrobes* extend from the middle of the rostrum to the eyes.

*Pectoral canal* deep in front, continued between the vertical lateral borders of the mesosternum in front of the middle coxæ, and extending as a smooth sloping surface as far as the truncate suture of the short metasternum, and not bounded there by any raised hind margin. Basal *ventral segment* medially flattened, with the intercoxal suture quite straight, rather larger than the second, which slopes backwards to the level of the abbreviated third and fourth.

The sternal structure differentiates this genus from *Acalles* and its allies.

*Omæacalles perspicuus*, sp. n.

*Piceous*, without nodosities; rostrum, antennæ, and tarsi red; legs somewhat rufescent; the body densely clothed with variegated scales and erect setæ.

*Rostrum* arched, moderately slender, rather longer than thorax, subparallel, nearly glabrous, finely punctate. *Thorax* as long as broad, a good deal narrowed anteriorly, moderately coarsely and closely punctured; covered with flat scales, mostly tawny brown, some blackish near the base, with a greyish or testaceous streak along the middle in front; the coarse erect setæ are chiefly pale testaceous grey. *Scutellum* absent. *Elytra* but little broader than thorax at the base, curvedly narrowed backwards, apparently regularly punctate-striate; the squamosity like that of the thorax, with numerous irregular dark specks; the suture at the apex is testaceous; the fourth interstices, near the middle, bear distinct grey spots; the setæ also are variegated.

*Legs* with coarse erect pale setæ, but near the knees dark spots occur. Femora darkly grooved near the apex.

Length (rost. excl.)  $1\frac{3}{4}$ ; breadth  $\frac{7}{8}$  line.

Waitakerei Range, Auckland. Described from three specimens in my own collection.

*TORILUS*, gen. nov.

*Body* compact, squamose. *Thorax* bisinuate at the base, so that the obtuse posterior angles appear to cover the shoulders. *Scutellum* distinct. *Elytra* cordiform, of the same width as the thorax at the base.

*Rostrum* arched, moderately broad, gradually narrowed towards the middle, rather less expanded at the apex than near the eyes, just in front of these slightly notched at each side. *Palpi* short, rigid and porrect. *Scrobes* invisible above, extending from before the middle, below the surface, to the lower and front part of the eyes, deep throughout their whole length. *Scape* flexuous, rather slender, moderately incrassate towards the extremity; it does not attain the eye. *Funiculus* 7-articulate, basal joint remarkably short, hardly more than half the length of the second, which is slender and elongate; third and fourth a little longer than broad; seventh transverse, evidently broader than the sixth; club ovate, not very perceptibly articulated. *Eyes* acuminate



in front. *Femora* long and stout, grooved and angulate, and medially dentiform underneath. *Tibiæ* rather short, with stout terminal hooks. *Tarsi* setose below, penultimate joint only moderately dilated and lobed.

*Pectoral canal* extends to just behind the middle coxæ, limited by elevated borders. *Metasternum* very short, so that the posterior coxæ almost touch the intermediate. Basal *ventral segment* twice the length of the second, the suture between them medially angulate; third and fourth moderately short.

The principal distinguishing characters are the unusually short basal joint of the funiculus, the constriction at the base of the rostrum, the overlapped humeral angles, and dentate femora.

*Torilus griseicollis*, sp. n.

*Convex*, subovate, opaque, piceous; rostrum pitchy red, antennæ and tarsi ferrugineous; thorax covered with yellowish-grey scales, the elytra with dark variegated squamæ.

*Rostrum* slightly longitudinally rugose and punctate, with pale brown scales at its base. *Club* pubescent, similar to the funiculus in colour. *Thorax* a third broader than long, its frontal half much, but not very abruptly, contracted, its extreme apex pale brown; near the middle there are two small crests; an ill-defined carina extends from the base to beyond the middle; the inflated sides bear pale reddish-brown squamæ, and near the middle of the base there are a few dark ones; the punctuation is hidden. *Scutellum* small, piceous. *Elytra* broadest near the middle, much narrowed and nearly vertical behind, their sides inflexed; when looked at sideways they are seen to be most elevated near the thorax; they are striate-punctate; the basal portion is uneven, a series of small brown crests almost forms a curve from one side to the other, but is least distinct near the suture, on the summit of the posterior declivity. Unabraded specimens may be more variegated, and probably have a more definite arcuate area on the hind-body.

*Underside* clothed with depressed greyish scales; third and fifth ventral segments infusate.

Length (rost. excl.)  $1\frac{3}{4}$ ; breadth 1 line.

Broken River. Described from a specimen found by Mr. J. H. Lewis.

## ONIAS, gen. nov.

*Rostrum* shorter than thorax, subparallel. The *scrobes* begin at or just before the middle of the rostrum and extend along the sides, below the upper surface, to the eyes. *Scape* subclavate for half of its length, slender near the base, attaining the eye. *Funiculus* 7-articulate, first joint thick, second of similar form and length but more slender, 3-6 gradually decrease in length, seventh short and transverse; club ovate. *Thorax* without ocular lobes, rather longer than broad, base bisinuate. *Scutellum* absent. *Elytra* cordate, as wide as thorax at the base. *Femora* simple, long and stout, grooved near the extremity. *Tibiæ* short, flexuous, uncinuate. *Tarsi* slender, nearly glabrous underneath, with only a few fine setæ on their third joint.

*Pectoral canal* limited between the intermediate coxæ by elevated borders. *Metasternum* short. Basal *ventral segment* broadly rounded between the coxæ, its apical suture quite straight; it is about double the length of the second; third and fourth, conjointly, as long as the second; the terminal narrow, depressed at each side.

Differentiated from *Tylodes*, *Acalles*, and their nearest allies by the nearly glabrous soles of the tarsi, abdominal structure, hair-like vestiture, &c. *Metacalles* has a long rostral canal, the base of the thorax is truncate, and the abdomen differs.

*Onias latisulcatus*, sp. n.

*Convex*, subovate, piceous; apex of rostrum distinctly red; tibiæ ferrugineous; antennæ testaceous or rufescent; clothed with minute dark fuscous and paler squamæ and numerous outstanding setæ.

*Rostrum* longitudinally sculptured and punctate, squamose near the base, smooth but not definitely carinate along the middle. *Thorax* rather longer than broad, widest just behind the middle, more, yet only gradually, narrowed in front than behind; coarsely and closely punctured, broadly channelled along the middle, and with a very slender carina or smooth line in the middle of the depression; at each side of this a few paler scales almost form spots. *Elytra* strongly rounded laterally, much narrowed, and nearly vertical behind; they are rather short; with series of oblong punctures along the middle, so as to appear regularly striate-punctate there; this area, from the base to the middle, is bordered by

a ridge formed by suberect testaceous or pale brown scales, on each shoulder there is usually a shorter dark one; there is also a transverse pale spot at each side in line with the hind thigh; the lateral punctuation is coarse, sometimes foveiform. The *legs* bear numerous dark outstanding setæ.

*Underside* dull piceous, with rather coarse punctures; in each of these there is a depressed, elongated, yellowish scale; the fifth ventral segment is rufescent and broadly depressed at each side.

♂ ♀. Length  $\frac{7}{8}$ – $1\frac{1}{8}$  (rost. excl.); breadth  $\frac{1}{2}$ – $\frac{5}{8}$  line.

Broken River (*Mr. J. H. Lewis*). Another of his numerous discoveries amongst fallen leaves and twigs.

*Obs.*—1424 must be removed from *Acalles*, so as to become known as *Onias sentus*.

*Onias ornatus*, sp. n.

*Convex*, medially contracted, opaque, piceo-rufous; rostrum entirely shining pitchy red; tarsi and antennæ pale ferrugineous; clothing variegate, pale brick-red and blackish, the long erect setæ numerous, very conspicuous on the legs as well as the body, and quite fuscous.

*Rostrum* finely and distantly punctate in front, longitudinally sculptured behind, with a few fusco-testaceous squamæ at the base. *Thorax* about a fourth longer than broad, evidently broadest behind the middle, gradually narrowed anteriorly, more strongly and obliquely towards the base; rather coarsely and closely punctured, nearly bare and a little shining at the apex and along the middle; the pale reddish elongated squamæ somewhat concentrated along each side of the broad, yet long, central depression. *Elytra* only about a fourth longer than the thorax, much wider at and before the middle than at the base, so that the body seems much contracted at the middle; they are almost vertical behind; they are striate-punctate; at the base, near the suture, there are two short elevations, composed of elongate slightly rufescent squamæ; along the sides and on the back the scales are shorter, but of similar colour, but there is a blackish, slightly raised, squamose spot on each shoulder, another further back and nearer the suture, one on the suture at the middle, and two on each side of the summit of the posterior declivity, the inner one the larger.

Easily distinguishable from *O. latisulcatus* by the brighter and more rufescent vestiture, by the thorax and elytra being appreciably broader near the middle; the scales are more

elongate on the thorax, and there is no carina in the median depression, &c.

*Underside* piceous, with greyish-yellow setiform scales; basal ventral segment broadly depressed, deeply and coarsely but not closely punctured; the intervals densely and very minutely sculptured, the fifth slightly rufescent, its punctuation rather shallow; it is not visibly depressed at the sides.

Length (rost. excl.) 1; breadth quite  $\frac{1}{2}$  line.

Broken River (*Mr. J. H. Lewis*).

*Mesoreda sulcifrons*, sp. n.

*Elongate*, suboblong, convex, piceo-rufous; densely covered with somewhat elongate scales, dark brown, tawny, or nearly white.

*Rostrum* rather longer than thorax, moderately slender, parallel, hardly at all arched above; apical portion with a few fine punctures and slender hairs, but appearing nude; the basal portion closely punctured and covered with tawny scales. *Thorax* a good deal contracted and a little depressed in front, distinctly and very closely punctate, the intervals narrow and somewhat rugose; most of the squamosity dark, but with a large grey patch near each hind angle; there is a narrow longitudinal median ridge; the apical scales are slightly raised, but do not form distinct crests; its base is strongly bisinuate. *Scutellum* greyish. *Elytra* oblong and of about the same width as the thorax till near the apex; they are striate, with numerous minute punctures on the interstices, which seem more or less rugose; the sutural area from the base to near the middle bears many white squamæ with slightly elevated, broad, fuscous borders; pallid scales also form a sort of interrupted arch behind the basal area, and extending from one shoulder to the other; there is a transverse patch on the hind declivity; the rest of their surface is covered with dark or tawny squamæ and short, coarse, erect setæ.

*Antennæ* rather slender; scape nearly glabrous; funiculus elongate, basal joint subpyriform, joints 2-7 gradually incrassate, seventh very transverse, so that the long articulated club is not very obviously marked off. *Femora* laterally compressed, notched near the extremity, but not distinctly dentate below. *Tibiæ* slightly flexuous, the two hind pairs slightly prominent externally near the base and extremity. *Tarsi* with greyish setæ.

Differentiated from *M. orthorhina* (1625) by an elongate

inter-ocular depression, by the thoracic ridge, the basal elevations on the elytra, more slender antennæ, and variegated squamosity.

♀. Length (rost. excl.)  $2\frac{1}{4}$ ; breadth  $1\frac{1}{8}$  line.

Timaru; one found by Mr. W. L. Wallace amongst leaves on the ground and another from Mr. A. Philpott, of Invercargill.

#### KENTRAULAX, gen. nov.

*Rostrum* stout, shorter than thorax, contracted medially. *Scrobes* deep, quite exposed above, beginning just before the middle and extending to the lower and front part of the eyes. *Antennæ* short and stout. *Scape* thick, gradually incrassate, but not clavate at the extremity; it does not reach the eye. *Funiculus* 7-articulate; basal joint obconical, not elongate; joints 2-7 gradually becoming thicker, transverse; the triarticulate oviform club not at all distinctly marked off. *Thorax* with rounded sides very abruptly contracted, but not depressed in front; base bisinuate, without ocular lobes. *Scutellum* distinct. *Elytra* oblong, of the same breadth as thorax, gradually and slightly narrowed posteriorly. *Femora* deeply notched and grooved near the extremity. *Anterior tibiæ* with a stout median mucro at its front face, and also angulate at the inner and outer extremities. *Tarsi* with brush-like soles, third joint expanded, its lobes narrowly separated. *Eyes* quite truncate in front.

*Pectoral canal* not deep, rather narrow between the front coxæ, not limited behind by the triangular mesosternal process, which has prominent front angles, the mesosternum itself being broadly depressed in front of the coxæ from one side to the other; the canal borders are not at all sharply defined laterally, being, indeed, thick and broad, and, near the front, each side bears a strong, remarkable, spiniform protuberance.

In *Oreda notata* the rostral canal is deep and limited throughout by elevated borders, the mesosternal process being in contact with the front coxæ, which are widely separated; the cavity is very deep and extends behind the anterior coxæ.

In *Aldonus* the canal terminates at the thickly pubescent hind face of the prosternum, and the broad depressed frontal portion of the mesosternum intervenes between its broad process and the flattened area between the anterior coxæ.

*Kentraulax* should be placed near these two genera, but is distinguished from both by the conspicuous protuberance at

each side of the rostral canal. The middle and hind tibiae are medially angulate externally and prolonged at the outer extremity, the former most distinctly, so that their structure is somewhat similar to that of *Psepholax*.

The genus is instituted for the more systematic location of *Oreda murina* (864), which now becomes *Kentraulax murina*.

*Getacalles favosus*, sp. n.

*Convex*, suboblong, opaque, rough; densely covered with variegated, small, depressed, and some elongated upright squamæ, yellowish brown or testaceous, the darker colour predominates, the lighter form crests and cover the suture of the elytra from behind the middle to the apex; antennæ and tarsi ferrugineous.

*Rostrum* moderately arched, parallel, thick, quite as long as thorax, constricted near the eyes, closely punctate, covered with rufo-fuscous scales almost to its apex. *Thorax* in front only about half the width of the basal portion, depressed and obtusely prominent, but not distinctly crested there; the larger basal part with two small pale crests near the front and two near the middle further apart, its sides rough, with pale outstanding squamæ. *Scutellum* very distinct, greyish. *Elytra* with thick humeral angles projecting beyond the base of the thorax; with coarse irregular punctures or foveæ and irregularly formed, slightly raised intervals, so as to appear somewhat favose; they bear about twenty more or less evident crests or nodosities, the most conspicuous being situated behind the middle. *Legs* roughly squamose.

*Underside* squamose, pale brown, the sides of the terminal segments blackish.

In *Tychanus*, the nearest ally, the rostral canal extends to the middle of the intermediate coxæ, where it is deep or cavernous; but in this species the hind part has a frontal slope, so that the tip of the rostrum cannot penetrate below the margin of the mesosternal process. The ventral segments are on two distinct planes, the terminal three being sunk below the level of the epipleura; the basal segment is more than double the length of the second in the middle, its hind suture is much sinuate, nearly vertical, and as densely squamose as its upper surface; third and fourth moderately short.

The *scape* is slender, flexuous, and a little incrassate towards the extremity. The *funiculus* is longer; second joint more slender than, but almost as long as, the first;

joints 3-7 gradually thickened. *Club* quadriarticulate, basal joint as large as the following three combined ; in *Tychanus* it is triarticulate.

Distinguished from the other species by its very asperate hind body and pallid suture.

Length (rost. excl.)  $1\frac{3}{4}$  ; breadth  $1\frac{1}{8}$  line.

Ligar's Bush, Papakura. Two specimens in my own collection.

#### BÆORHYNCHODES, gen. nov.

*Body* very convex, nearly as high behind the middle as it is broad ; compact, oval, squamose.

*Rostrum* elongate, rather slender, almost quite parallel-sided. *Mandibles* distinct. *Scrobes* lateral, beginning at the middle and extending to the eyes. *Head* short, on a rather higher plane than the rostrum, smooth and subglobular below. *Eyes* large, finely faceted, subtruncate in front. *Scape* slender, almost attaining the eye. *Funiculus* elongate, basal joint stouter and a little longer than second ; joints 3-7 gradually incrassate. *Club* elongate-oval. *Thorax* conical, without ocular lobes. *Elytra* subcordate, closely adapted to base of thorax, bisinuate, and only slightly wider at the shoulders than the base of thorax.

*Legs* moderately long but stout ; tibiæ thickly mucronate at extremity. *Tarsi* setose above ; basal two joints scantily clothed, third densely clothed with grey hairs underneath ; basal two joints moderately slender, third rather widely expanded, deeply excavate above, but with very short lobes.

*Pectoral canal* deep, wide in front ; its raised margins extend to hind part of the intermediate coxæ. *Metasternum* short, somewhat uneven, and on a higher plane than the ventral segments. *Abdomen* with five segments, the first on a higher level than second, and, in the middle, nearly the length of the following two combined ; third and fourth each shorter than second, yet not much abbreviated ; 2-4 with deep sutures ; fifth subconical.

Very similar to *Euthyrhinus* ; the scrobes, however, are not abbreviated, and do not extend to the lower surface of the rostrum ; the sternal canal differs, and the elytral apices are not acuminate. In *Rhynchodes* the scrobe attains the eye (which is more pointed in front) and begins before the middle ; the scape consequently is proportionately longer, the rostrum differs, and so does the pectoral canal. *Bæorhynchodes*, in fact, is intermediate between the genera cited.

*Baorhynchodes cristatus*, sp. n.

*Subopaque*, nigro-piceous; the legs, rostrum, and antennæ rufo-piceous.

*Head* apparently impressed between the eyes, with slender dark grey squamæ. *Rostrum* finely punctate, with some slender hairs near the base, not distinctly carinate. *Thorax* much narrowed, but not abruptly constricted in front, with two erect crests just over the head and an indistinct one at the middle of each side; there is a depression before the scutellum; the surface distinctly but not coarsely or closely punctured; its squamosity decumbent, disposed irregularly, and nearly as dark as the derm. *Scutellum* distinct, nearly white. *Elytra* sharply limited or marginate laterally and rufescent; sides inflexed, asperate, and with fovea-like impressions; each elytron has four series of about ten deep elongate depressions, which can hardly be called punctures, and do not form striæ, all being plainly separated; the lateral or fifth series are very coarse; on the suture, at the middle, there is a well-marked dark crest; in front of this, on the suture only, whitish scales extend to the scutellum; interstices finely punctured; the squamæ are dark but not coarse, are nearly concolorous, and do not entirely cover the surface; the posterior declivity is not quite vertical.

*Legs* with short grey and blackish setæ; femora not deeply notched below; intermediate tibiæ thickened and arched just below the knees, the others nearly straight. The upper vestiture of the tarsi is remarkable, the third joint of the anterior bearing coarse outstanding setæ.

Length (rost. excl.)  $2\frac{1}{2}$ ; breadth  $1\frac{1}{2}$  line.

Broken River. Unique. Although not showy, this species is, to me, a very attractive little weevil. Mr. J. H. Lewis discovered it.

## Group Anthribidæ.

*Anthribus lewisi*, sp. n.

*Nigrescent*, tomentose, variegate; the front of rostrum greyish or pale tawny; scutellum and a spot in front of it white; two small basal crests on the elytra and five or six smaller spots near the sides tawny; along the elytral suture there are six dull intensely black marks, and about as many more nearer the sides; the pygidium is greyish; legs of a chocolate hue, with a grey spot on the middle and another at the extremity of the tibiæ.

*Rostrum* shorter than thorax, flat and a little expanded in



front. *Antennæ* inserted medially below the sides ; second joint almost as stout as, but longer than, the exposed portion of first ; 3-5 elongate and nearly equal ; 6-8 rather shorter, but more incrassate at apex ; club moderate, basal joint longest and subtriangular, second transverse, terminal short, oval. *Eyes* oblique, entire, oval, and prominent. *Thorax* scarcely broader than long, a little narrower in front than behind, only moderately rounded laterally ; its punctuation not distinct ; at the sides there are a few small granules ; there is a crested prominence on the middle ; the carina is near the base at the middle, but further from it at the sides ; posterior angles not sharply defined. *Elytra* slightly uneven above, distinctly broader than thorax at the base, apices obtusely rounded ; they have series of small punctures, which are more or less interrupted by the small crests.

*A. browni* has the eyes lateral and longitudinally oval, instead of being oblique and more on the upper part of the head ; the rostrum is longer and evidently narrower ; the basal thoracic carina differs, and the antennæ are longer, with more elongated joints. *A. bullatus* is its nearest congener.

Length (rost. incl.)  $2\frac{1}{4}$  ; breadth  $\frac{7}{8}$  line.

Broken River. One individual, discovered by Mr. J. H. Lewis, whose name has been given to it.

*Anthribus philpotti*, sp. n.

*Rostrum* in front as broad as the head, excluding the eyes, feebly incurved ; the back covered with grey hairs. *Thorax* transverse, its sides strongly rounded, distinctly and closely punctate, clothed chiefly with dark hairs, but with a narrow grey streak near the base ; the carina fine, medially angulate, distant from the basal margin and bent forward at the sides ; there are two small apical crests. *Scutellum* small, grey. *Elytra* wider than thorax at the base, oblong, parallel, finely but distinctly striate-punctate ; each elytron bears a large basal prominence, a smaller one behind the middle, and two still smaller on top of the posterior declivity, the inner the larger of the two ; the clothing consists of greyish, brown, and dark hairs, so intermingled that no definite spots are formed ; each shoulder is covered with greyish-yellow pubescence, and thus appears conspicuous. *Legs* and tarsi pubescent, variegate, testaceous, and fuscous.

*Antennæ* as long as the body, inserted in foveiform cavities at the sides ; basal two joints stout and of the same length, the first with distinct grey pubescence ; third about a third longer than fourth, clavate at the extremity ; joints 4-9 also

elongate, ninth gradually thickened, tenth only slightly longer than broad, eleventh oviform; they are fusco-testaceous. *Eyes* prominent, transverse, evidently emarginate in front. General ground-colour piceous.

Its systematic position is near *A. lanuginosus* (968).

Length (rost. incl.)  $1\frac{3}{4}$ ; breadth  $\frac{3}{4}$  line.

Invercargill. One specimen on cardboard submitted for identification by Mr. A. Philpott, after whom I have named it.

[To be continued.]

## PROCEEDINGS OF LEARNED SOCIETIES.

### GEOLOGICAL SOCIETY.

June 16th, 1909.—Prof. W. J. Sollas, LL.D., Sc.D., F.R.S.,  
President, in the Chair.

The following communications were read:—

#### 1. 'The Carboniferous Limestone of County Clare.'

By James Archibald Douglas, M.A., B.Sc., F.G.S.

The district with which this paper deals forms the westernmost limit of the great central Carboniferous Limestone plain of Ireland.

The limestone floors nearly the whole of Eastern Clare, from the southern shore of Galway Bay to the banks of the Shannon. This area, for the purposes of description, is divided into two main districts.

The whole of the northern region is formed by a vast elevated plateau of Upper or Viséan Limestone, with a surface more than 100 square miles in extent, which rises on the north and east in steep terraced cliffs, but to the south-west dips gently below the so-called 'Coal-Measure' Series. The surface of this plateau is formed of bare rock, devoid of vegetation and presenting the typical appearance of a Karst landscape. The rainfall is considerable, but is nearly all carried off by subterranean channels.

The southern district presents a totally different aspect. The high ground is no longer formed of limestone: that on the east being formed by Old Red Sandstone and Silurian rocks, that on the west by Coal-Measures. The older formations appear as two anticlinal flexures with a north-easterly trend, forming the mountains of Slieve Aughty and Slieve Bernagh, between which lies a broad syncline of Carboniferous Limestone. The margin of this syncline is formed by Tournaisian shales and limestone, the successive zones